Health and Usage Monitoring Systems (HUMS) R&D Review Meeting

NASA Ames Research Center, Mountain View, CA

Building 219, 2nd Floor, Conference Room 203

June 6 – 8, 2006

DRAFT AGENDA

Color Legends:		Confirmed Speakers Not yet Confirmed			Hours-Min	
	Day	y 1: Tuesday June 6 - Rotorcraft Damage	Tolerance	(RCDT)		
8:45 AM	Opening R	emarks	TBD	NRTC	0:10	
8:55 AM	Meeting Objectives/Perspectives/Expectations Le/Cuevas FAA		0:15			
	Developme	Development and Validation of Crack Growth Models And Life				
9:10 AM	Enhancem	ent Methods	Atluri	UCI	0:45	
9:55 AM	Development and Validation of Crack Growth Databases for Use in Damage Tolerance Approach for Aircraft Propellers and Rotorcraft Newman, Jr. MSU				0:45	
10:40 AM	Break				0:15	
10:55 AM	Rotorcraft	Materials Database Development	Newman	ARL	0:45	
	Developme	ent and Validation of Improved Fatigue Crack Growth				
	Test Methods and Analytic Models Applicable to Damage Tolerance					
11:40 AM	Analyses of	of Aircraft Propellers	Forman	NASA JSC	0:45	
12:25 PM	Lunch				1:00	
		Interpretation of Small Fatigue Crack Growth in Metallic Structures with Emphasis on the Statistical				
1:25 PM	Characteris	stics	Kardomateas	GiT	0:45	
	Fatigue Cr	ack Growth Testing to Quantify the Effects of Shot				
2:10 PM	Peening fo	r Metallic Rotorcraft Components	Locke	CRI	0:45	
2:55 PM	Break			0:15		
3:10 PM	Improveme	ents in Crack Detection of Critical RC Components	Gray	ISU	0:45	
3:55 PM	Robust Cra	ack Growth Modeling	Irving	Cranfield	0:45	
4:40 PM	FAA Asses	ssments of RCDT Progress	Le/Cuevas	FAA	0:25	
5:05 PM		Adjourn For Day 1				

Contact Information During Meeting at NASA Ames

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Color Lege	nds: Confirmed Speakers	Not yet Confirmed			Hours-Min
	Day 2: Wednes	sday June 7 - RO	CDT		
8:30 AM	Adminstrative Remarks TBD NRTC/FAA				
8:35 AM	CRI-FAA - Bell Rotorcraft Damage Tolerance	Li	Bell	0:45	
9:20 AM	CRI-FAA - Sikorsky Rotorcraft Damage Tolera	TBD	Sikorsky	0:45	
10:05 AM	CRI-FAA - Boeing Rotorcraft Damage Tolerar	TBD	Boeing	0:45	
10:50 AM	Break				
11:05 AM	Corrosion and Fatigue Crack Growth		Forman	NASA JSC	0:25
11:30 AM	Life Enhancement	TBD	MSU	0:30	
12:00 PM	Lunch				
1:00 PM	NRTC/CRI Bell Advanced Composite Design	and Allowables	Li	Bell	0:45
	Evaluating Damage Tolerance Methods Appli	ed to Rotorcraft &			
1:45 PM	Propeller Systems		Forth	NASA JSC	0:45
2:30 PM	Break				0:15
2:45 PM	FAA RCDT Strategic Plan and Roadmap		Le	FAA	1:00
	RCDT Research Results/Outputs and Develo	pment of FAA			
3:45 PM	Guidance Materials		Le/Cuevas	FAA	0:30
4:15 PM	Discussions and Q&A				0:45
5:00 PM	PM Ajourn for Day 2				

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Color Legends:		Confirmed Speakers Not yet Confirmed			Hours-Min
		Day 3: Thursday June 8 - HI	UMS		
8:30 AM	Opening Remarks			FAA	0:05
8:35 AM	HUMS Degradation		Maley	U.S. Navy	0:45
]	Structural I	Jsage Monitoring and Fllight Regime Recognition			
9:20 AM	Algorithm a	and Methodology Enhancement and Validation	Anderson	ERAU	0:45
	Smart Pato	ch System (SPS) for ConditionBased Maintenance of			
10:05 AM	Rotorcraft		Amrita	Acellent	0:45
10:50 AM		Break			0:15
	Developme	ent, Validation, and Demonstration of HUMS			
11:05 AM	Technolog	ies to Detect Rotorcraft Mechanical Faults	Meneghini	Smiths	0:45
11:50 AM	Lunch				1:00
12:50 PM	HUMS Ground-Based Station Automated Testing Meneghini			Smiths	0:45
	Commercia	al-of-the-Shelf HUMS Assessment and Guidance			
1:35 PM	Developme	ent	Robinson	Goodrich	0:45
2:20 PM	Break			0:15	
0.05.014			-		0.45
2:35 PM		HUMS Research Using RASCAL Aircraft & Future R&D	Fletcher	U.S. Army	0:45
3:20 PM		risory Circular Demonstration and Compliance	TBD	TBD	0:45
4:05 PM	FAA Asses	sments of HUMS Progress	Le/Cuevas	FAA	0:30
4:35 PM	HUMS Res	search Results/Outputs and Substantiation of HUMS AC	Le/Cuevas	FAA	0:25
5:00 PM		Ajourn for Day 3			

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Color Legends:		Confirmed Speakers Not yet Confirm	ned		Hours-Min
	Day 4: Friday June 9 - FAA - U.S. Army Collaborative HUMS Meeting				
		By Invitation O	nly		
9:00 AM	Opening Remarks and Introduction TBD U.S. Army			U.S. Army	0:05
9:05 AM	FAA HUMS & RCDT Program Overview		Le	FAA	1:00
10:05 AM	FAA HUMS	S Flight Test Requirements	Le	FAA	0:15
10:20 AM	Break			0:15	
			Major		
10:35 AM	AFDD/Ame	es Flight Projects Office Overview	Robinson	U.S. Army	0:30
11:05 AM	RASCAL J	UP-60A System Overview Capabilities	Fletcher	U.S. Army	1:00
12:05 PM	Lunch			1:00	
			Major		
1:05 PM	EH-60L & (OH-58D Research Aircraft capabilities	Robinson	U.S. Army	0:30
1:35 PM	FAA HUMS	S Flight Test Discussions	All	All	1:00
2:35 PM	Tour of AFDD Hangar and Aircraft				1:00
3:35 PM	AFDD Roto	orcraft program Overview	TBD	U.S. Army	1:00
4:35 PM	NASA Roto	orcraft Program Overview	TBD	NASA	1:00
5:35 PM		Ajourn			